'In' Box

When is the best time for teachers to prepare final examinations?

The director and former director of Kansas State University's Office of Educational Improvement give the same advice that teachers often give students: Don't wait until the last week of the semester.

For teachers, that means writing test items after each class session, say Victoria L. Clegg and her predecessor, Richard E. Owens. The exams will then more fairly represent material as it was actually covered, they say. Other suggestions can be found in a pamphlet by Ms. Clegg and Mr. Owen, *Tips for Writing Tests* (Kansas State University Graduate Services and Publications, 1120 Bertrand Street, Manhattan, Kan. 66502; 17 pages; $1.95).

•

Teachers have a tougher job than doctors have, says an education professor at Stanford University who has studied both of their professions.

Both have to make hard decisions, often under great pressure, but teachers have to confront "a more subtle and insidious stress," Lee S. Shulman told a recent alumni conference. While doctors usually see one patient at a time, he said, teachers spend most of their time dealing with large groups.

•

Going to Brussels? The information service of the North Atlantic Treaty Organization, which has its headquarters in that city, stands ready to arrange "briefing programs" for American college professors, administrators, and students.

According to Nyoka White, a U.S. liaison officer at the information service, such arrangements are already being made for American visitors about four times a month, but NATO would like to expand them. She says the programs, which take about 4½ hours, typically begin at 9 a.m. with a background film on the organization, followed by discussions on East-West issues with NATO members from various countries. Special-interest sessions can be added.

Because August and December are traditional European vacation periods, no briefings will be scheduled during those months. Other details may be obtained from the NATO Information Service, 1110 Brussels, Belgium.

•

A pension expert who recently criticized the performance and governance of the Teachers Insurance Annuity Association and the College Retirement Equities Fund (see *The Chronicle*, May 11) has been named to the committee that nominates policyholder representatives to the companies' board of trustees.

Roy A. Schotland, a law professor at the Georgetown University Law Center, says he does not know how his selection came about, but that he has agreed to serve on the committee. This week in Washington he is scheduled to debate Thomas C. Edwards, T.I.A.A.-C.R.E.F. chairman, at a symposium sponsored by the National Education Association.

Personal & Professional

39 Pct. of College Administrators Changed Jobs in 2-Year Span

By ROBERT L. JACOBSON

WASHINGTON

Some of the campus officials who work most closely with college and university presidents have the highest turnover rates among administrators in higher education, according to a survey covering nearly 44,000 positions between the fall of 1980 and the summer of 1982.

More than half of the presidential assistants, executive vice-presidents, and chief public-relations officers changed jobs in that two-year period, the survey results show. The presidents themselves, meanwhile, had one of the lowest turnover rates—averaging less than 13 per cent a year.

(Any official whose position changed—whether he left his college or took another job within it—was counted in the survey. The results thus do not distinguish between administrators who were replaced outright and those who were promoted.)

The survey, of some 3,250 colleges and universities, was made by Higher Education Publications, Inc., in connection with its compilation of a national directory of colleges and universities. Among the other highlights:

► The combined turnover rate for administrators in 55 job categories was 39.3 per cent for the two years covered by the survey.

► Turnover was several percentage points higher at private institutions than at public institutions. Overall, the difference was more than 5 points (41.9 per cent versus 36.7 per cent), but even for colleges of comparable size the rates were almost always higher at private institutions.

► As a rule, the smaller the institution, the higher the turnover rate. For example, administrators at private colleges with up to 1,000 students had a two-year rate of 45.4 per cent, while those at public colleges with more than 20,000 students had a rate of 34.5 per cent.

► Chief executives tended to change jobs more often if they headed campuses within a university system and thus reported to a systemwide president or chancellor. For those officials in charge of systems or separate institutions not belonging to systems, the turnover rate was 25.9 per cent for the two years. In contrast, those reporting to systemwide chiefs had a two-year rate of 36.2 per cent.

► Other administrators with comparatively low turnover rates included deans of pharmacy (19.4 per cent), head librarians (26.3 per cent), deans of veterinary medicine (30.3 per cent), deans of home economics (30.4 per cent), deans of dentistry (31.1 per cent), and registrars (31.5 per cent).

► The highest turnover rates were reported for assistants to presidents (55.9 per cent), directors of information systems (54.4 per cent), executive vice-presidents (51.1 per cent), deans of natural resources (50.4 per cent), chief development officers (50.2 per cent), chief public-relations officers (50.1 per cent), and deans of theology (50 per cent).

► For several positions, the two-year turnover rate was more than 15 points higher in private institutions than in public institutions. That was true for chief executives of campuses within university systems, admissions directors, directors of information systems, and deans or directors of agriculture, continuing education, and extension.

A comparison of the survey's results with turnover statistics previously reported by the National Center for Education Statistics for 1978-79 and 1979-80 pointed to a marked increase in job-changing since

Continued on Following Page

Administrative Turnover, 1980-82, by College Size

Public Institutions

Enrollment	Positions	No. Leaving	Rate
Up to 1,000	1,326	521	39.3%
1,001-2,500	4,273	1,625	38.0%
2,501-5,000	4,612	1,746	37.9%
5,001-10,000	5,112	1,849	36.2%
10,001-20,000	4,379	1,552	35.4%
Over 20,000	2,603	899	34.5%
Totals	**22,305**	**8,192**	**36.7%**

Private Institutions

Enrollment	Positions	No. Leaving	Rate
Up to 1,000	10,189	4,629	45.4%
1,001-2,500	6,132	2,481	40.5%
2,501-5,000	2,395	861	35.9%
5,001-10,000	1,673	622	37.2%
10,001-20,000	804	300	37.3%
Over 20,000	212	78	36.8%
Totals	**21,405**	**8,971**	**41.9%**

All Institutions

Enrollment	Positions	No. Leaving	Rate
Up to 1,000	11,515	5,150	44.7%
1,001-2,500	10,405	4,106	39.5%
2,501-5,000	7,007	2,607	37.2%
5,001-10,000	6,785	2,471	36.4%
10,001-20,000	5,183	1,852	35.7%
Over 20,000	2,815	977	34.7%
Totals	**43,710**	**17,163**	**39.3%**

SOURCE: HIGHER EDUCATION PUBLICATIONS, INC.

Computer Grants May Depend on Whom You Know

By JUDITH AXLER TURNER

Getting a grant or a gift from a computer company may well depend on whom you know, what you know, and how well you understand the company's needs.

The experience of John R. Kronenburger, an instructor in electrical engineering at Northern Illinois University, is a case in point. Last month, relying on someone he knew at Intel Corporation, he was able to buy more than $100,000 worth of computer equipment for the university for only $13,000.

"One of the sales reps from Intel was trying to sell me something," Mr. Kronenburger recalls. "I said we might be willing to set up labs or courses around Intel equipment. Intel was interested. They are very informal."

The sales person then put Mr. Kronenburger in touch with Jerry L. Eschweiler, a technical-support engineer in Intel's office in Rolling Meadows, Ill., and the two engineers "did a lot of talking over the phone."

Ultimately it was Mr. Eschweiler who put the proposal together, and the company accepted it.

"Intel wants to keep universities up to date in current technologies," Mr. Eschweiler explains. "I work with colleges in this area to set up a proposal, and the company's college-relations department decides how much can be donated."

GEORGE TARBAY, NORTHERN ILLINOIS UNIVERSITY

A personal contact and "a lot of talking over the phone" helped John R. Kronenburger buy computers at a discount.

Intel's informality is intentional, says Emil J. Sarpa, its corporate manager for academic affairs.

"I wanted this to be non-bureaucratic," he says of its approach to colleges and uni-

Continued on Following Page

Job Changes Continued from Preceding Page

then. The rate was up for almost all administrative positions, and substantially so—at least 10 points over two years—for about half of them.

Among those with the largest increases were executive vice-presidents (up 31.1 per cent), chief planning officers (up 27 4 per cent), assistants to presidents (up 25.8 per cent), and deans or directors in several academic fields—natural resources (up 26.4 per cent), technology (up 24.9 per cent), and architecture (up 22.7 per cent).

Turnover declined for only four positions—chief executives of campuses within a system, chief academic officers, and deans of home economics and pharmacy—and by less than two points in each case.

Federal Directory Ended

Higher Education Publications, the company conducting the latest survey, was created last fall after a federal budget cut led the Department of Education to discontinue its annual directory of colleges and universities. The company's president, Frederick F. Hafner, said it would repeat its survey and publication of its directory next year.

This year's edition, which does not include the data on administrative turnover, lists institutions alphabetically by state and gives their addresses, telephone numbers, tuition, accreditation, and enrollment, among other details. It also gives the names of top administrators of each institution, and indexes those separately.

Mr. Hafner said about 6,000 copies of the 475-page directory had been sold since February. The price is $25, or $23.75 prepaid, with postage and handling charges included. Discounts for bulk orders are available.

In addition, selected data from the survey may be ordered, and the company is selling mailing labels at $55 per 1,000 for specified groups of administrators in its data bank.

For further information, write to Higher Education Publications, 1302 Eighteenth Street, N.W., Suite 401, Washington 20036; (202) 296-9106.

Computers Continued from Preceding Page

versities. "There are only three questions I want answered in any proposal: What do they want and when? What do they want to do with it? and Where do they plan to go from here?"

Mr. Kronenburger, who in addition to his academic job does telecommunications work for private companies, knew just what he wanted at Northern Illinois: a sophisticated digital-systems laboratory to replace equipment that students had hooked up so they could write software in the ones and zeros of the binary system.

He also wanted it right away, and he intended to use it to teach engineering and computer-science students how to use sophisticated equipment and write software in high-level computer languages.

His plans were an excellent match for Intel's own objectives, and the equipment is expected to be in place by the fall.

Informality the Norm

Intel's informal structure for grants and gifts seems to be the norm, rather than the exception, in the computer field. Of several computer companies contacted by *The Chronicle*, only one—Atari—evaluates requests for funds in a formal way. The others depend far more on their relationships with particular institutions or people.

Whether that is good news for colleges and scholars looking for money and equipment depends on where you sit. To some extent, the policies give an edge to faculty members and administrators who work with computer-company personnel on a regular basis, whether on the campus or in consulting jobs.

"Lots of people are getting donations from the industries they work with," says a university administrator who prefers that his name not be used. "They drive some development people up the wall. Every time the development people go to a business, someone has been there before them."

In many cases it makes no difference who applies for a gift as long as the right people at the computer company are involved.

Hewlett-Packard, which has one of the most active programs of gifts and grants to colleges, is as likely to respond to a college instructor's request as it is to one from the campus fund-raising office. Either way, the most important component is involvement of the company's local representatives—technicians, sales people, or recruiters.

"If we make a grant, we want to know that the field-sales network will be supportive," says Barbara D. Williams, equipment-gift coordinator at Hewlett-Packard's headquarters in Palo Alto, Cal. A proposal is less likely to succeed if it "comes in cold" and the authors "haven't bothered to develop a network within the company," she adds.

A recently announced gift of nearly 2,000 computers—and the service and personnel to maintain them—from Digital Equipment Corporation to the Massachusetts Institute of Technology was based on close ties between the company and the university (see *The Chronicle*, June 8). The gifts are part of a joint contribution that includes 1,000 personal computers from International Business Machines corporation.

Peter D. Connell, Digital's manager of corporate information, says it has had "a longstanding relationship" with M.I.T.

"We have been supporting the university since the company was founded 25 years ago," he says. Kenneth H. Olsen, the president of Digital, is an M.I.T. graduate.

"Our computer scientists have had close and regular interactions with Digital," adds Eric Johnson, assistant dean for resource development at M.I.T. and assistant dean of its engineering school. "It is not like we were entering into discussions with someone we didn't know."

Company Issues

What you know also makes a difference. Applicants need insight into what a computer company is looking for.

"Every company has an issue it cares about," says David Beaver, assistant to the chairman of the board at Apple Computer, Inc. Apple has "a strong bias" to supporting elementary and secondary education, he says, while Hewlett-Packard "needs engineers they can afford," and so finds it worthwhile to provide help to higher education.

Hewlett-Packard's Ms. Williams does not deny that there is a benefit to the company in donating equipment to colleges and universities.

"Our thrust is getting equipment out into the hands of the students," she says, in part because they may later become customers in their own right.

"There is a fringe benefit for recruiting or in having students design around our equipment when they get jobs in the industry," says another industry official.

The companies "want to get students acquainted with their equipment," Mr. Kronenburger observes. Later, the students may end up working for them, he says—or, if they work for other companies, they still may recommend equipment they used in college.

Carnegie-Mellon University, which announced a joint effort with I.B.M. last year to develop a new system for university computing, also appreciates the value of accommodating the computer industry's needs.

Higher Education's Needs

In discussing the project with I.B.M.—which is providing $20-million worth of equipment, personnel, and grants—the university proposed that its engineering department work with the company to test and modify I.B.M. equipment and software for the needs of higher education.

The resulting product may prove to be commercially marketable, says Douglas E. Van Houweling, Carnegie-Mellon's vice-provost for computing and planning. "We believe that an arrangement in which I.B.M. owns the intellectual property is more attractive to I.B.M."

Such an arrangement, attractive though it may be to I.B.M., is not typical of that company's grants pattern, however. A spokesman says its large program of grants rarely includes equipment.

Apple Computer, meanwhile, sometimes uses grants of equipment to help its sales. Recently Brown University announced that Apple was giving it 50 of its Lisa computers as part of a three-year program of "creating and testing new ways to use computers for teaching and scholarship." As part of that project, says a university official, Brown agreed to buy at least $2-million worth of other Apple equipment—at "significant discounts from retail."

An official at Apple says the arrangement was "worked out through the marketing department."

Computer corporations are not the only ones looking out for their own interests, however. Says a university administrator:

"People look at the grants and the outside support you obtain when it comes time to make decisions about promotions. And it looks good on a résumé."

FACT-FILE

Turnover of Administrators, 1980-82, by Position and Type of Institution

	Public institutions			Private institutions			All institutions		
	Positions	No. Leaving	Rate	Positions	No. Leaving	Rate	Positions	No. Leaving	Rate
Chief executive officer	897	241	26.9%	1,802	458	25.4%	2,699	699	25.9%
Chief executive within a system	669	217	32.4%	149	79	53.0%	818	296	36.2%
Executive vice-president	308	142	46.1%	476	259	54.4%	784	401	51.1%
Assistant to president	536	294	54.9%	518	295	56.9%	1,054	589	55.9%
Chief academic officer	1,335	536	40.1%	1,609	626	38.9%	2,944	1,162	39.5%
Registrar	1,175	350	29.8%	1,538	505	32.8%	2,713	855	31.5%
Director, admissions	826	268	32.4%	1,268	609	48.0%	2,094	877	41.9%
Head librarian	1,314	335	25.5%	1,513	408	27.0%	2,827	743	26.3%
Director, institutional research	496	199	40.1%	297	162	54.5%	793	361	45.5%
Chief business officer	1,358	423	31.1%	1,621	608	37.5%	2,979	1,031	34.6%
Director, information systems	107	51	47.7%	62	41	66.1%	169	92	54.4%
Director, computer center	705	249	35.3%	497	218	43.9%	1,202	467	38.9%
Director, personnel services	600	203	33.8%	390	168	43.1%	990	371	37.5%
Director, security	184	81	44.0%	123	66	53.7%	307	147	47.9%
Contract administrator	264	101	38.3%	169	78	46.2%	433	179	41.3%
Chief public-relations officer	539	254	47.1%	642	338	52.6%	1,181	592	50.1%
Director, information office	433	172	39.7%	348	181	52.0%	781	353	45.2%
Director, alumni relations	299	126	42.1%	651	330	50.7%	950	456	48.0%
Chief development officer	489	241	49.3%	1,046	529	50.6%	1,535	770	50.2%
Chief student-life officer	1,277	405	31.7%	1,248	524	42.0%	2,525	929	36.8%
Dean of men	164	69	42.1%	234	108	46.2%	398	177	44.5%
Dean of women	111	39	35.1%	224	88	39.3%	335	127	37.9%
Director, student placement	579	193	33.3%	645	304	47.1%	1,224	497	40.6%
Director, student financial aid	948	299	31.5%	1,075	469	43.6%	2,023	768	38.0%
Director, student counseling	580	226	39.0%	399	180	45.1%	979	406	41.5%
Chief planning officer	345	166	48.1%	259	120	46.3%	604	286	47.4%
Dean or director of:									
Agriculture	113	34	30.1%	11	7	63.6%	124	41	33.1%
Architecture	59	25	42.4%	26	11	42.3%	85	36	42.4%
Arts and sciences	632	257	40.7%	279	119	42.7%	911	376	41.3%
Business	521	193	37.0%	230	103	44.8%	751	296	39.4%
Continuing education	772	309	40.0%	348	195	56.0%	1,120	504	45.0%
Dentistry	50	18	36.0%	24	5	20.8%	74	23	31.1%
Education	430	157	36.5%	173	83	48.0%	603	240	39.8%
Engineering	210	75	35.7%	95	42	44.2%	305	117	38.4%
Evening division	190	87	45.8%	102	47	46.1%	292	134	45.9%
Extension	207	90	43.5%	68	41	60.3%	275	131	47.6%
Fine arts	236	93	39.4%	80	40	50.0%	316	133	42.1%
Graduate programs	345	121	35.1%	296	117	39.5%	641	238	37.1%
Home economics	81	26	32.1%	11	2	18.2%	92	28	30.4%
Journalism	48	18	37.5%	17	6	35.3%	65	24	36.9%
Law	83	37	44.6%	105	45	42.9%	188	82	43.6%
Library science	48	19	39.6%	14	8	57.1%	62	27	43.5%
Medicine	109	38	34.9%	65	35	53.8%	174	73	42.0%
Music	47	19	40.4%	66	33	50.0%	113	52	46.0%
Natural resources	101	47	46.5%	24	16	66.7%	125	63	50.4%
Nursing	298	131	44.0%	114	57	50.0%	412	188	45.6%
Pharmacy	52	11	21.2%	15	2	13.3%	67	13	19.4%
Physical education	138	62	44.9%	48	22	45.8%	186	84	45.2%
Public health	93	44	47.3%	21	9	42.9%	114	53	46.5%
Social work	165	75	45.5%	64	23	35.9%	229	98	42.8%
Special session	102	39	38.2%	113	55	48.7%	215	94	43.7%
Technology	249	114	45.8%	49	23	46.9%	298	137	46.0%
Theology	2	2	100%	102	50	49.0%	104	52	50.0%
Veterinary medicine	28	8	28.6%	5	2	40.0%	33	10	30.3%
Vocational education	358	163	45.5%	37	22	59.5%	395	185	46.8%
Totals	**22,305**	**8,192**	**36.7%**	**21,405**	**8,971**	**41.9%**	**43,710**	**17,163**	**39.3%**

SOURCE: HIGHER EDUCATION PUBLICATIONS, INC.

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News Summary

Articles on inside pages

National Public Radio suffered a net loss of $4.5-million in the first seven months of this fiscal year and may not survive, according to a recent audit. Story on Page 3.

Brown University's "new curriculum"—not so new anymore, but still its biggest drawing card for new students—is under review by the institution. Story on Page 4.

A company that coaches students preparing for the Medical College Admission Test is being sued because of "irregularities" in the students' scores. Story on Page 7.

The Senate has rejected a proposal to ban temporarily the taxing of low-rent faculty housing. Story on Page 9.

Education has become an issue in the 1984 Presidential campaign, and higher-education advocates are pleased. Story on Page 9.

Following a self-imposed suspension of its basketball program, the University of San Francisco will resume its participation in the sport in 1985-86. Story on Page 15.

Academic authors receive surprisingly little information about the financial terms of their publishing contracts. Story on Page 19.

The full texts of most of the American Chemical Society's scientific journals are now available electronically. Story on Page 23.

France's National Assembly has approved sweeping changes in the country's higher-education system, but did not accept all the government's reforms. Story on Page 17.

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'Discrete' Math Challenges Calculus as Computers Alter Students' Needs

By JUDITH AXLER TURNER

The supremacy of calculus in the freshman and sophomore mathematics curriculum is being challenged, in part because the computer has changed the mathematical needs of students in so many fields.

The most recent evidence of that trend is an award last week by the Alfred P. Sloan Foundation of $40,000 grants to each of six college and university mathematics departments to initiate experimental courses that balance classical calculus with instruction in what is called discrete mathematics.

Traditionally, calculus has been taught in the mathematics curriculum taken by most freshmen and sophomores. Discrete mathematics has not been taught until the junior and senior years.

Calculus is part of continuous mathematics, which deals with such things as the motion of airplanes, cars, or particles in physics. Calculus was invented to solve such continuous-motion problems. Discrete mathematics, which deals with individual values and quantities, seems to many to be easier to understand. Counting is part of discrete mathematics. The computer, too, depends on discrete mathematics because it manipulates individual symbols and quantities.

The Sloan grants were made to the mathematics departments at Colby College (Maine), the University of Delaware, the University of Denver, Florida State University, Montclair State College, and St. Olaf College.

The grants will allow faculty members and administrators "thinking time" to plan the courses and to teach the first versions of them, said Stephen B. Maurer, a program officer at the foundation who is on leave from Swarthmore College, where he is an associate professor of mathematics.

Important for Computers

Discrete mathematics is particularly important to computer-science students, although many people argue that the proliferation of computers has increased the importance of discrete mathematics in all science and engineering studies—and even in such fields as economics and psychology.

"Mathematics is influenced by problems that need solving in other areas," says Anthony Ralston, a professor of

Continued on Page 6, Column 1

Civil-Rights Panel Urges Reagan Not to Forsake Anti-Bias Policy

5 of 6 commissioners ask broad interpretation of law

By CHERYL M. FIELDS

WASHINGTON

The Reagan Administration must "halt efforts to reduce federal civil-rights enforcement in education," the U.S. Commission on Civil Rights warned last week, or else forsake "fundamental national policy developed over more than a quarter century."

The commission urged the Administration to give broad interpretation to the major law barring sex bias in education when it files a brief with the Supreme Court next month in a challenge to the law brought by Grove City College.

In a 10-page statement supported by five of its six members, the commission urged the Justice Department to embrace lower-court rulings and existing federal regulations that adopt an expansive reading of Title IX of the Education Amendments of 1972, which bars sex bias in federally assisted education programs or activities.

The department must file a brief early in July responding to Grove City's assertion that the Education Department has no right to enforce Title IX at the Pennsylvania institution.

Clarence M. Pendleton, Jr., the conservative black Republican who chairs the commission, did not support the statement. All five of the other commissioners—three of whom President Reagan is trying to replace—did, however.

Grove City, which already has filed its brief with the Court, says the Justice Department has no authority to require it to sign a form promising to comply with Title IX—or otherwise to enforce the law on its campus—because it accepts no direct federal aid.

Federal district and appeals courts, however, have said that the law applies to

Continued on Page 12, Column 1

Faculty Raises Top Inflation, Average 6.4 Pct.

Purchasing-power rise feared to be 1-year 'blip'

By BEVERLY T. WATKINS

WASHINGTON

The purchasing power of college and university professors increased this year for the first time in almost a decade, according to the annual report on faculty salaries of the American Association of University Professors.

The average faculty salary, after adjusting for inflation, rose 2 per cent during 1982-83, said W. Lee Hansen, a professor of economics at the University of Wisconsin at Madison and chairman of the A.A.U.P.'s salary committee.

While the increase is "a much-welcomed development," Mr. Hansen said, it does little to offset a decade's cumulative decline of approximately 20 per cent in "real" salaries—those adjusted for changes in consumer price levels.

In fact, "this year's gain may be a one-time occurrence, nothing more than a blip on the proverbial radar screen," Mr. Hansen told the association's annual meeting here last week.

Smaller Increases for 1983-84

The drop in the rate of inflation and the relative stability of consumer prices last year have made it difficult for faculty members to argue that they need larger salary increases, Mr. Hansen said. In fact, he noted, decreasing inflation plus the continuing economic difficulties of many state governments have already resulted in smaller increases in some faculty salaries for 1983-84.

The report is based on data collected from about 2,800 institutions by the A.A.U.P. and the federal government's National Center for Education Statistics.

The report indicated that the average salary for all faculty members at two-year and four-year colleges and universities last year was $27,430.

Faculty members teaching at universities earned an average of $31,010, while their colleagues at four-year undergraduate institutions made an average of

Continued on Page 20, Column 1

JOHN C. PHILLIPS

Five Years After Bakke

It's been five years since the Supreme Court ordered Allan Bakke, a white engineer, to be admitted to medical school in a much-publicized "reverse discrimination" case. But the ruling appears to have had little effect on the proportion of black students in professional schools.

For details, see Page 11.

Copyright *Continued from Preceding Page*

the Law School Admission Council, against public inspection.

But the register's statement also noted that even the federal Trade Secrets Act did not prevent disclosure where it was authorized by another law, as it is in the case of copyrights.

The deadline for initial public comments on the statement is July 18.

List of Free Circulars

Meanwhile, the Copyright Office has announced the availability of 26 circulars—most of them new or recently revised—about federal copyright regulations and procedures, including a circular on registration for computer programs.

All of the circulars are free and may be ordered from the Copyright Office, Library of Congress, Information and Publications Section, LM-455, Washington 20559. Orders should specify the numbers of the circulars, which are listed below.

Copyright application forms may be ordered by leaving a recorded message at (202) 287-9100. For assistance, call (202) 287-8700.

RECENT CIRCULARS

- Circular R6—"Obtaining Copies of Copyright Office Records and Deposits" (November, 1982).
- Circular R40b—"Deposit Requirements for Registration of Claims to Copyright in the Visual Arts" (April, 1983).
- Circular R56a—"Copyright Registration of Musical Compositions and Sound Recordings" (February, 1983).
- Circular R61—"Copyright Registration for Computer Programs" (May, 1983).
- Circular R62—"Copyright Registration for Serials on Form SE" (March, 1983). According to the circular, serials are defined as "works issued or intended to be issued in successive parts bearing numerical or chronological designations and intended to be continued indefinitely." The classificaton includes such works as periodicals, newspapers, magazines, journals, and proceedings of meetings.

REVISED CIRCULARS

- Circular R1c—"Copyright Registration Procedures" (February, 1983).
- Circular R2—"Publications on Copyright" (March, 1983). Includes publications of the Copyright Office, the National Technical Information Service, the Library of Congress Photoduplication Service, and the Superintendent of Documents.
- Circular R4—"Copyright Fees Effective January 1, 1978" (published September, 1982).
- Circular R5—"How to Open and Maintain a Deposit Account in the Copyright Office" (May, 1983).
- Circular R8—"Supplementary Copyright Registration" (May, 1983).
- Circular R38a—"International Copyright Relations of the United States" (July, 1982).
- Circular R70—"Performances of Music on Coin-Operated Phonorecord Players" (June, 1982).
- Circular R71—"Replacement Certificates for Coin-Operated Phonorecord Players" (September, 1982).
- Circular R72—"Correcting Errors in Jukebox Certificates and Securing Appropriate Refunds" (September, 1982).
- Circular R99—"Highlights of the New Copyright Law" (August, 1982).

OTHER CIRCULARS

- Circular R96, Section 201.4—"Recordation and Transfers of Certain Other Documents" (January, 1983). Covered documents include certain cable-television-system contracts, notices on licensing for certain "phonorecords of nondramatic musical works," and statements on the identity of authors of "anonymous and pseudonymous works."
- Circular R96, Section 201.6—"Payment and Refund of Copyright Office Fees" (March, 1983).
- Circular R96, Section 201.8—"Import Statements" (January, 1983). Applies to works "consisting preponderantly of nondramatic literary material" in English that are to be imported into the U.S.
- Circular R96, Section 201.10—"Notices of Termination of Transfers and Licenses Covering Extended Renewal Term" (March, 1983).
- Circular R96, Section 201.13—"Notices of Objection to Certain Noncommercial Performances of Nondramatic Literary or Musical Works" (November, 1980).
- Circular R96, Section 201.14—"Warnings of Copyright for Use by Certain Libraries and Archives" (March, 1983).
- Circular R96, Section 201.15—"Voluntary License to Permit Reproduction of Nondramatic Literary Works Solely for the Use of the Blind and Physically Handicapped" (March, 1983).
- Circular R96, Section 201.17—"Renewals" (March, 1983).
- Circular R96, Section 201.20—"Methods of Affixation and Positions of the Copyright Notice on Various Types of Works" (January, 1983).
- Circular R96, Section 201.22—"Advance Notices of Potential Infringement of Works Consisting of Sounds, Images, or Both" (March, 1983).
- Circular R96, Section 201.23—"Transfer of Unpublished Copyright Deposits to the Library of Congress" (January, 1983).

Faculty Raises *Continued from Page 1*

$22,890. Those at two-year colleges made an average of $23,700.

Although it outpaced inflation, the average salary increase actually dropped from 9 per cent for 1981-82 to 6.4 per cent this year. "This is a marked change from the previous five years, in which nominal salary increases rose rather steadily each year, from a low of 4.7 per cent in 1976-77 to a 9-per-cent figure in 1981-82," Mr. Hansen commented.

Last January, a survey conducted for *The Chronicle* estimated that the average salary increase for all faculty members at all types of institutions would be 7.6 per cent this year. Survey data were obtained directly from individual faculty members by John Minter Associates, whereas the A.A.U.P.'s data are obtained from institutions.

Salary increases were largest for faculty members in the lower ranks, indicating that institutions may have awarded the biggest increases to younger faculty members in an effort to retain them.

Mr. Hansen said the most striking change in the salary picture was a "widening discrepancy" between average increases for faculty members at private institutions and those at public colleges.

Faculty members at public colleges earned an average of $27,860 for 1982-83, compared with $28,680 for those at independent private institutions. Those at church-related institutions earned $22,950.

The report indicated that faculty salaries at public institutions rose 5.9 per cent, while those at independent private institutions increased 8.3 per cent. At church-related institutions, the increase was 7 per cent.

"This marks the third successive year that salary increases at public institutions lagged behind those of institutions in the other two sectors," Mr. Hansen remarked.

Public institutions employ almost three-quarters of the full-time faculty members, he said.

Report Copyrighted by AAUP

In a change of policy, the A.A.U.P. has copyrighted this year's report from the salary committee. It has distributed the complete report to association members in the July-August issue of *Academe*, the association's magazine; nonmembers may purchase the report for $25.

Because of the copyright, *The Chronicle* will not be able to publish the A.A.U.P.'s list of average salaries at individual institutions.

"The Annual Report on the Economic Status of the Profession, 1982-83" is available for $25 prepaid from the A.A.U.P., One Dupont Circle, Washington 20036. Additional tabulations may be ordered from Maryse Eymonerie Associates, P.O. Box 520, McLean, Va. 22101.

FACT–FILE

Average Faculty Compensation by Rank and Type of Institution, 1982-83

Academic rank	SALARY				COMPENSATION			
	Public	Independent private	Church-related	All	Public	Independent private	Church-related	All
Category I: Doctoral institutions								
Professor	$38,180	$43,950	$38,710	$39,380	$45,260	$53,080	$46,070	$46,890
Associate professor	28,310	30,440	29,290	28,700	33,830	36,730	35,150	34,370
Assistant professor	23,170	24,530	23,690	23,440	27,750	29,320	28,010	28,060
Instructor	17,550	19,970	19,880	18,060	20,900	23,720	23,510	21,490
Lecturer	20,420	21,090	19,360	20,500	25,300	25,190	22,850	25,210
All ranks	30,260	34,350	29,840	31,010	36,060	41,380	35,540	37,030
Category IIA: Comprehensive institutions*								
Professor	33,490	33,750	32,890	33,480	40,140	40,610	38,920	40,110
Associate professor	26,770	26,800	26,080	26,720	32,130	33,120	31,190	32,050
Assistant professor	22,040	21,590	21,380	21,910	26,350	25,510	25,380	26,140
Instructor	17,660	17,230	17,350	17,580	21,000	20,090	20,390	20,830
Lecturer	18,010	20,220	21,890	18,540	21,980	23,760	26,100	22,460
All ranks	26,940	26,440	25,800	26,790	32,280	31,570	30,660	32,050
Category IIB: Baccalaureate institutions								
Professor	30,770	32,410	26,130	29,320	36,340	39,380	31,130	35,080
Associate professor	25,530	24,370	21,710	23,580	30,430	29,340	25,720	28,110
Assistant professor	21,550	19,900	18,220	19,650	25,520	23,630	21,300	23,160
Instructor	18,240	16,940	15,580	16,720	21,570	19,670	17,890	19,440
Lecturer	18,610	21,020	15,050	18,610	22,130	25,190	17,150	22,070
All ranks	24,490	24,340	20,860	22,890	29,030	29,220	24,600	27,170
Category IIC: Specialized institutions								
Professor	37,970	33,260	23,330	32,380	43,890	39,880	28,780	38,460
Associate professor	29,530	25,880	20,180	26,280	34,380	30,920	24,100	31,050
Assistant professor	24,620	21,400	17,690	21,960	29,230	25,220	20,700	25,940
Instructor	19,070	17,120	14,740	17,170	22,810	20,400	17,120	20,410
Lecturer	22,160	13,560	†	18,700	27,610	15,480	†	22,690
All ranks	29,780	25,150	20,290	25,840	34,820	29,980	24,440	30,610
Category III: 2-year institutions with academic rank								
Professor	30,480	22,690	19,750	30,080	36,710	27,040	23,130	36,200
Associate professor	25,840	20,640	18,720	25,560	30,950	24,810	22,170	30,620
Assistant professor	21,840	17,130	16,920	21,490	26,210	20,160	19,610	25,750
Instructor	18,880	13,500	13,540	18,270	22,650	15,740	15,680	21,860
Lecturer	16,010	†	‡	15,600	19,220	†	‡	18,770
All ranks	24,190	17,290	16,730	23,700	29,040	20,460	19,500	28,420
Category IV: 2-year institutions without rank								
No rank	24,960	15,810	15,040	24,340	29,320	18,340	17,490	28,580
All categories combined except IV:								
Professor	35,520	38,540	29,060	35,470	42,230	46,530	34,650	42,350
Associate professor	27,260	27,320	23,680	26,840	32,610	32,860	28,100	32,120
Assistant professor	22,460	21,950	19,470	21,960	26,860	26,070	22,880	26,170
Instructor	18,100	17,190	15,960	17,640	21,580	20,190	18,440	20,900
Lecturer	19,580	20,380	19,140	19,700	24,100	24,220	22,530	24,050
All ranks	27,860	28,680	22,950	27,430	32,260	34,420	27,190	32,760

Percentage Increases from 1981-82 to 1982-83

Academic rank	SALARY				COMPENSATION			
	Public	Independent private	Church-related	All	Public	Independent private	Church-related	All
Category I: Doctoral institutions								
Professor	5.9%	9.2%	9.4%	6.7%	6.3%	9.6%	9.8%	7.1%
Associate professor	6.1%	8.7%	8.4%	6.6%	6.7%	9.4%	9.3%	7.2%
Assistant professor	6.6%	9.7%	8.4%	7.2%	7.2%	11.0%	9.1%	7.9%
Instructor	6.5%	7.8%	8.5%	6.8%	7.2%	7.8%	9.4%	7.4%
All ranks	6.1%	9.1%	8.8%	6.8%	6.6%	9.8%	9.5%	7.3%
Category IIA: Comprehensive institutions*								
Professor	4.6%	6.3%	6.8%	4.9%	4.7%	6.7%	7.4%	5.3%
Associate professor	5.2%	7.9%	7.5%	5.7%	5.3%	8.2%	8.6%	6.0%
Assistant professor	5.7%	7.7%	7.2%	6.1%	5.6%	8.1%	7.9%	6.1%
Instructor	5.6%	9.4%	8.4%	6.2%	5.5%	10.0%	8.9%	6.2%
All ranks	5.0%	7.3%	7.2%	5.5%	5.0%	7.6%	8.0%	5.6%
Category IIB: Baccalaureate institutions								
Professor	5.9%	8.1%	6.8%	7.0%	6.6%	8.3%	6.9%	7.3%
Associate professor	6.3%	8.1%	6.5%	6.8%	6.9%	8.2%	6.7%	7.2%
Assistant professor	6.9%	7.3%	6.6%	6.9%	7.5%	7.5%	6.9%	7.2%
Instructor	7.5%	8.4%	6.5%	7.3%	8.2%	8.7%	6.5%	7.6%
All ranks	6.5%	7.9%	6.6%	6.9%	7.1%	8.1%	6.8%	7.3%
Category IIC: Specialized institutions								
Professor	8.0%	8.2%	5.8%	7.7%	8.3%	7.7%	5.9%	7.6%
Associate professor	6.9%	7.8%	4.8%	7.0%	7.1%	7.5%	5.0%	7.0%
Assistant professor	9.4%	7.2%	5.9%	8.0%	10.9%	7.4%	7.2%	9.0%
Instructor	3.2%	3.6%	4.4%	3.6%	4.1%	4.5%	6.3%	4.6%
All ranks	7.8%	7.4%	5.5%	7.2%	8.4%	7.2%	6.0%	7.5%
Category III: 2-year institutions with academic rank								
Professor	8.4%	4.0%	3.5%	8.3%	9.1%	3.7%	4.3%	8.9%
Associate professor	6.4%	3.4%	3.2%	6.3%	7.1%	3.4%	4.8%	7.0%
Assistant professor	6.9%	6.0%	7.3%	6.9%	7.5%	6.3%	7.1%	7.4%
Instructor	7.7%	2.8%	4.8%	7.2%	8.3%	3.7%	5.4%	7.9%
All ranks	7.2%	4.0%	5.3%	7.1%	7.9%	4.4%	5.6%	7.7%
Category IV: 2-year institutions without academic rank								
No rank	5.6%	6.3%	5.0%	5.6%	5.9%	6.1%	5.1%	5.9%
All categories except IV:								
Professor	5.6%	8.4%	7.1%	6.3%	5.6%	8.7%	7.4%	6.4%
Associate professor	5.8%	8.2%	6.9%	6.3%	6.1%	8.6%	7.5%	6.6%
Assistant professor	6.4%	8.3%	6.9%	6.8%	6.8%	8.9%	7.4%	7.2%
Instructor	6.5%	7.0%	6.8%	6.7%	6.9%	7.5%	7.1%	7.0%
All ranks	5.9%	8.3%	7.0%	6.4%	6.1%	8.7%	7.4%	6.7%

* Institutions that award degrees beyond the bachelor's degree but do not qualify for Category I.
† Too few individuals to warrant publication of data.
‡ No data reported.

SOURCE: AMERICAN ASSOCIATION OF UNIVERSITY PROFESSORS

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